

SERVICE MANUAL

AI Synthesis Module

M3R

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KORG

1. SPECIFICATIONS

| | |
|------------------------|---|
| System | : AI synthesis system (full digital processing) |
| Tone generator | : 16 voice, 16 oscillator |
| Wave memory | : PCM 16 Mbit |
| Effect section | : 2 systems of digital multi-effects |
| Number of program | : 100 programs |
| Number of combinations | : 100 combinations |
| Demo | : 5 songs |
| Outputs | : 1/L, 2/R, 3, 4, headphones |
| Card slot | : PCM data, programs |
| MIDI | : IN, OUT, THRU REMOTE jack |
| Display | : 16 character × 2 line backlit LCD |
| Options | : RAM card (MCR-03), ROM cards, PCM cards |
| Power consumption | : 11 W nominal |
| External dimensions | : 430 (W) × 405 (D) × 88 (H) mm |
| Weight | : 5.9Kg (not including rack-mount adapter) |

* Specifications and appearance are subject to change without notice for product improvement.

ADVARSEL!

Lithiumbatteri. Eksplosionsfare. Udskiftning må kun foretages af en sagkyndig, og som beskrevet i service manualen. Batteriet må kun udskiftes med batterier af samme fabrikat og type.

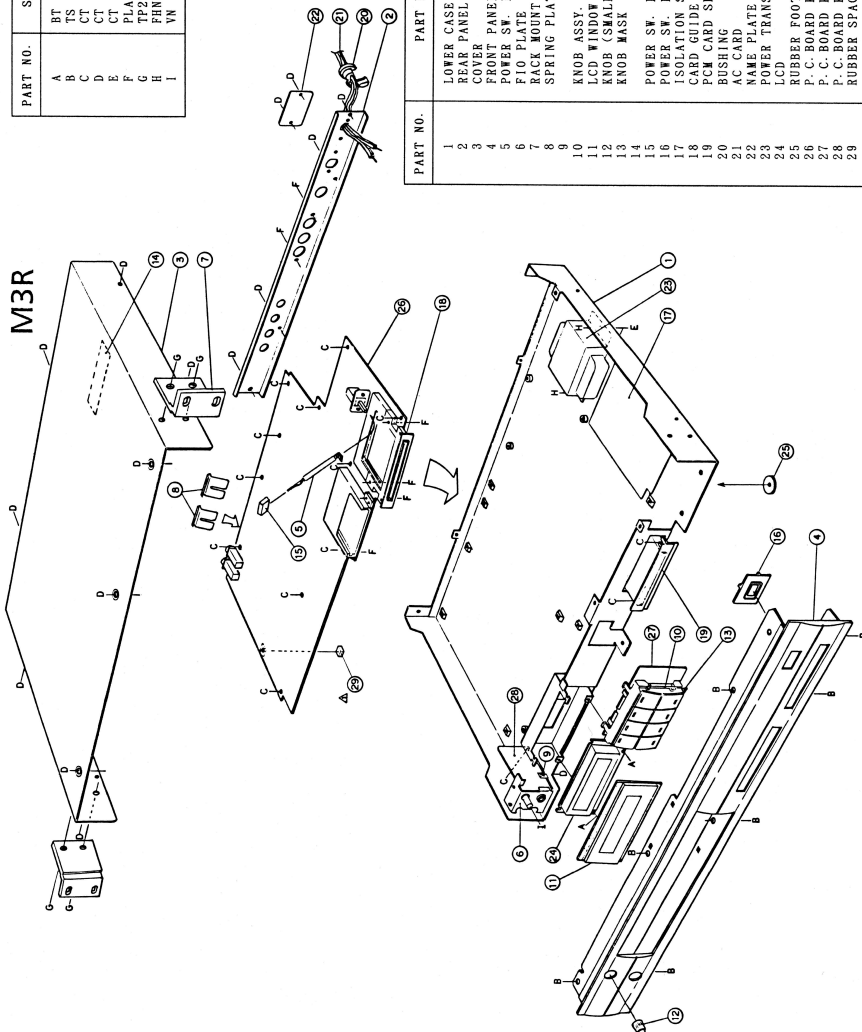
Litiumparisto!

Pariston saa vaihtaa ainoastaan huoltohenkilöstö saman valmistajan vastaavalla tyyppöllä. Virheellisestä käsittelystä syntyy räjähdysvaara.

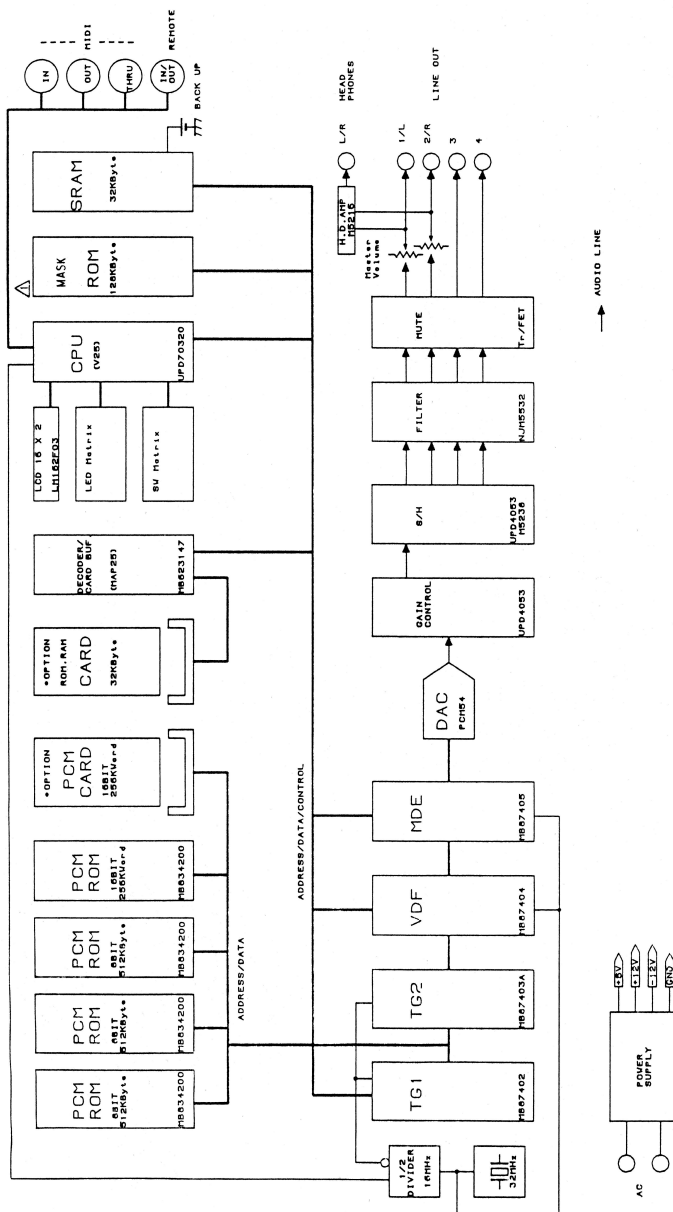
2. STRUCTURAL DIAGRAM

| PART NO. | SCREWS & NUT | Q'TY |
|----------|------------------|------|
| A | BT B 2MC 2x5 | 2 |
| B | TS F B2MC 3x6 | 7 |
| C | CT B 2MC 3x8 | 14 |
| D | CT B 2MC 3x8 | 16 |
| E | CT B 2MC 4x10 | 2 |
| F | PLAY B B2MC 3x10 | 6 |
| G | TP2G F B2MC 4x10 | 4 |
| H | FHN 2MC 4 | 2 |
| I | VN B2MC 7 | 1 |

| PART NO. | PART NAME | PART CODE |
|----------|--------------------|-----------|
| 1 | LOWER CASE | 641005800 |
| 2 | REAR PANEL | 641005500 |
| 3 | COVER | 640086600 |
| 4 | FRONT PANEL | 641005200 |
| 5 | POWER SW. BAR | 640086800 |
| 6 | FIO PLATE | 640086800 |
| 7 | RACK MOUNT ADAPTOR | 640087000 |
| 8 | SPRING PLATE | 644003000 |
| 9 | KNOB ASSY. | 620021800 |
| 10 | LCD WINDOW | 630010800 |
| 11 | KNOB (SMALL) | 620020800 |
| 12 | KNOB MASK | 550012700 |
| 13 | POWER SW. KNOB | 620018200 |
| 14 | POWER SW. FRAME | 640030200 |
| 15 | ISOLATION SHEET | 630007500 |
| 16 | GUIDE | 640088500 |
| 17 | POWER CARD SLOT | 640028300 |
| 18 | BUSHING | 400012000 |
| 19 | AC CARD | 313001800 |
| 20 | NAME PLATE | 500013000 |
| 21 | POWER TRANSFORMER | 001087100 |
| 22 | LCD | 001087100 |
| 23 | RUBBER FOOT | 001087100 |
| 24 | P.C. BOARD KLM-871 | 001087100 |
| 25 | P.C. BOARD KLM-872 | 001087100 |
| 26 | P.C. BOARD KLM-873 | 001087100 |
| 27 | RUBBER SPACER | 500012900 |



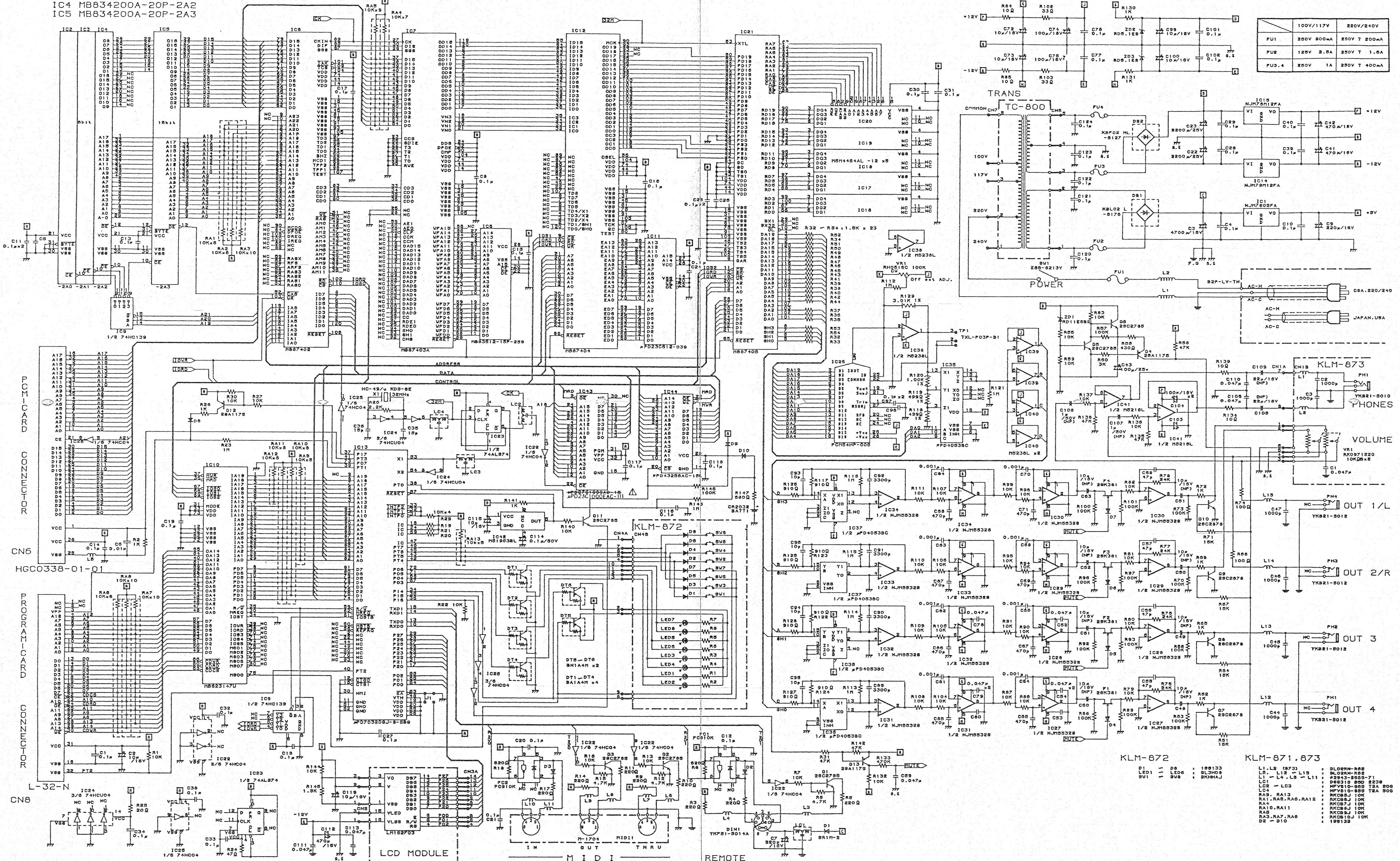
3. BLOCK DIAGRAM



4. CIRCUIT DIAGRAM

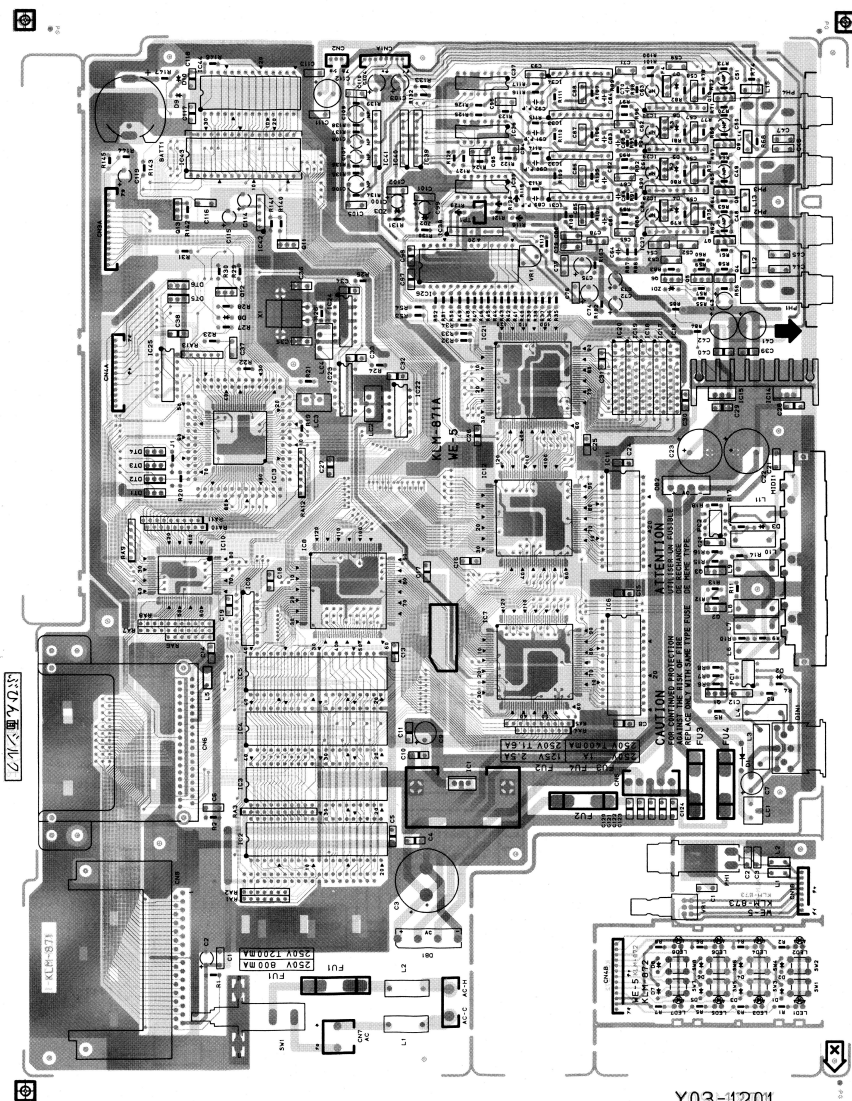
KLM871/872/873

IC2 MB834200A-20P-2A0
IC3 MB834200A-20P-2A1
IC4 MB834200A-20P-2A2
IC5 MB834200A-20P-2A3



5. P.C. BOARD

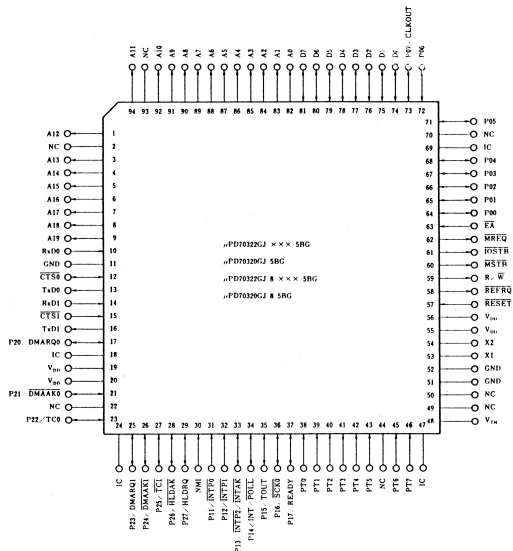
KLM871/872/873



Y03-1201

6. REFERENCE DATA

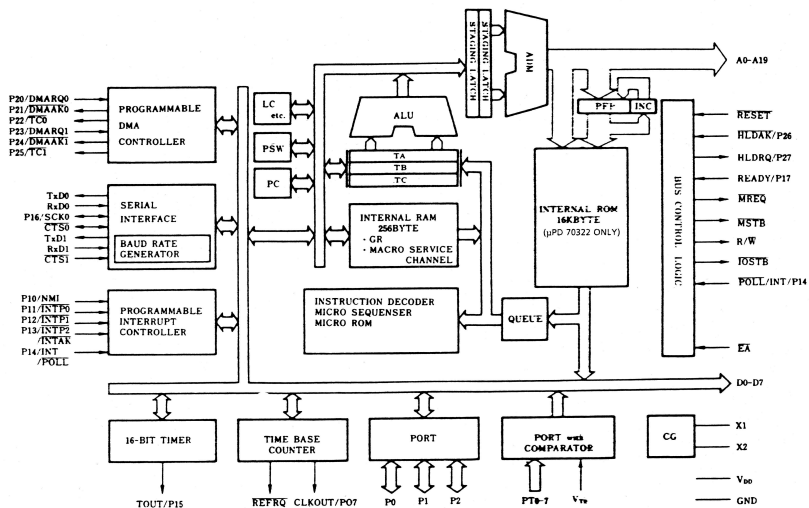
UPD 70320 G-8-5-BG



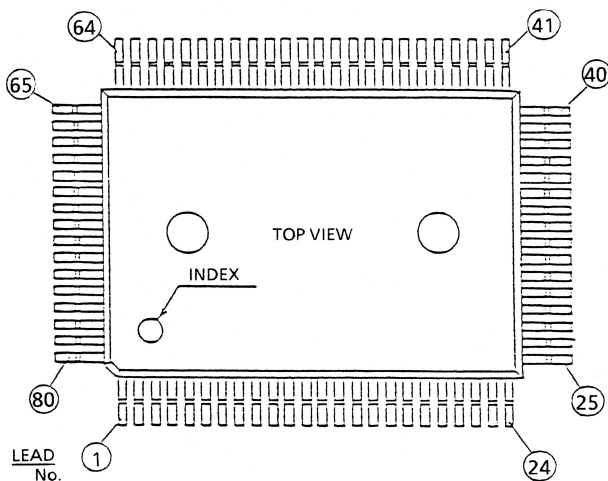
PIN FUNCTION

| Pin Name | I/O | Pin Name | I/O | Pin Name | I/O |
|----------|-----|----------|-----|----------|-----|
| P00-P06 | I/O | TXD0 | 0 | EA | I |
| P07 | I/O | TXD1 | 0 | X1 | I |
| NMI | I | RXD0 | I | X2 | I |
| INTP0 | I | RXD1 | I | D0-D7 | I/O |
| INTP1 | I | CTS0 | I/O | A0-A19 | 0 |
| INTP2 | I | CTS1 | I | MREQ | 0 |
| P14-P17 | I/O | REFRQ | 0 | MSTB | 0 |
| P20-27 | I/O | VTH | I | R/W | 0 |
| P70-P77 | I | RESET | I | RSTB | 0 |
| VDD | - | GND | - | IC | - |

BLOCK DIAGRAM



MB 623147 (MAP 25)



PIN FUNCTION

| No. | I/O | Pin Name | No. | I/O | Pin Name |
|-----|-----|----------|-----|-----|----------|
| 1 | I | IA19 | 21 | I | IA8 |
| 2 | I | IA18 | 22 | I | IA7 |
| 3 | I | IA17 | 23 | I | IA6 |
| 4 | I | IA16 | 24 | I | IA5 |
| 5 | I | IA15 | 25 | I | IA4 |
| 6 | I | IA14 | 26 | I | IA3 |
| 7 | I | IA13 | 27 | I | IA2 |
| 8 | I/O | PD7 | 28 | I | IA1 |
| 9 | I/O | PD6 | 29 | I | IA0 |
| 10 | I/O | PD5 | 30 | I | WREQ |
| 11 | I/O | PD4 | 31 | I | MODE |
| 12 | - | VSS | 32 | - | VSS |
| 13 | I/O | PD3 | 33 | - | VDD |
| 14 | I/O | PD2 | 34 | I | I0ST |
| 15 | I/O | PD1 | 35 | I | RW |
| 16 | I/O | PD0 | 36 | O | WRD |
| 17 | I | IA12 | 37 | O | WWR |
| 18 | I | IA11 | 38 | O | I0RD |
| 19 | I | IA10 | 39 | O | I0WR |
| 20 | I | IA9 | 40 | O | OA12 |

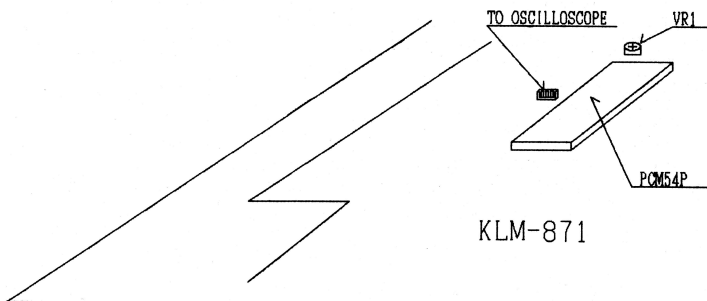
| No. | I/O | Pin Name | No. | I/O | Pin Name |
|-----|-----|----------|-----|-----|----------|
| 41 | O | OA7 | 61 | O | OA11 |
| 42 | O | OA6 | 62 | O | OA9 |
| 43 | O | OA5 | 63 | O | OA8 |
| 44 | O | OA4 | 64 | O | OA13 |
| 45 | O | OA3 | 65 | O | OA14 |
| 46 | O | OA2 | 66 | O | CDWR |
| 47 | O | OA1 | 67 | O | I0S0 |
| 48 | O | OA0 | 68 | O | I0S1 |
| 49 | I/O | D0 | 69 | O | I0S2 |
| 50 | I/O | D1 | 70 | O | I0S3 |
| 51 | I/O | D2 | 71 | O | I0S4 |
| 52 | - | VSS | 72 | - | VSS |
| 53 | I/O | D3 | 73 | - | VDD |
| 54 | I/O | D4 | 74 | O | I0S5 |
| 55 | I/O | D5 | 75 | O | MS00 |
| 56 | I/O | D6 | 76 | O | MS01 |
| 57 | I/O | D7 | 77 | O | MS02 |
| 58 | O | CDCS | 78 | O | MS03 |
| 59 | O | OA10 | 79 | O | MS6 |
| 60 | O | CDRD | 80 | O | MS7 |

7. CHECK AND ADJUSTMENT

Check and adjustment of KLM-871 p. c. board

- 1) Connect the oscilloscope to the test point (TP1) on KLM-871.
(The right side is GND and the left side is the output signal when you see the test point from the front side of M3R.)

fig.1



- 2) When power is turned on, two indications below are appeared in order.

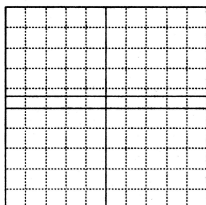
KORG
AI Synthesis M3R

----->

100 Krypton
I29 I74 I35 I27

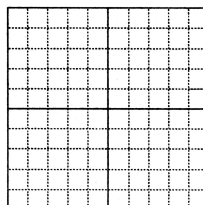
(This example is appeared
in case of PRELOAD DATA.)

Confirm that DC level on the oscilloscope indicates 0V at this time.
If not, adjust with VR1 on KLM-871.



NG

5mV/div
1m sec/div



GOOD

Before you start TEST MODE

When M3R is changed to TEST MODE, all data is broken.
So save the important data to RAM card etc. before you start.

1 How to start TEST MODE

Turn the switch on while pressing [COMBI] and [PROG].
The display indicates TEST MODE after the SELF TEST is finished automatically.
SELF TEST ---- Confirm that the inside SRAM works normally.
Note that the data in M3R is lost by this operation.

2 TEST MODE

1) MENU SCREEN

After the SELF TEST is finished normally, the display indicates these letters below automatically.

M3R TEST MODE
Ver. xx

xx indicates the ROM version number.

2) SW & LED TEST

T1:SW/LED

When [▲/YES] SW. is pressed,
the display indicates as left.

T1:SW/LED
PLAY

When [▲/YES] SW. is pressed again, the display indicates
the name of the key which should be pressed as left
and LEDs with SW light simultaneously.

Press SWs whose LEDs light exactly in order.

T1:SW/LED
NO

When the last [▲/YES] SW. is pressed,
the process changes to the next.

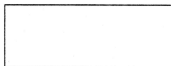
3) LCD TEST

T1:LCD

LCD display indicates as left.



When [▲/YES] SW. is pressed, all dots are lit as left.



When [▲/YES] SW. is pressed again, all dots are put out.
When [▲/YES] SW. is pressed again,
the process changes to the next.

4) TG TEST

Connect the oscilloscope to OUT 1 of M3R.
Turn the master volume of M3R to MAX.

T2:TG
WAVE

LCD display indicates as left.
Press [▲/YES] SW.

T2:TG
WAVE 1

While the display is indicating as left,
TG TEST WAVE 1 is output from OUT 1.

Confirm that WAVE 1 outputs neither sound nor noise.
Press [▲/YES] SW.

T2:TG
WAVE 2

Confirm that WAVE 2 also outputs neither sound nor noise.
Press [▲/YES] SW.

T2:TG
WAVE 3

Confirm the waveform like fig.1.
Press [▲/YES] SW.

T2:TG
WAVE 4

Confirm the waveform like fig.2.
Press [▲/YES] SW.

T2:TG
WAVE 5

Confirm the waveform like fig.3.
When [▲/YES] SW. is pressed again,
the process changes to the next.

5) OUTPUT TEST

T3:OUT

LCD display indicates as left.
Press [▲/YES] SW.

T3:OUT
OUT 1 OFF

The display indicates as left.
Connect the noise meter to the output that is indicated
on the display and measure the noise level.

T3:OUT
OUT 2 OFF

Press [▲/YES] SW. in order at this time
and measure the noise level of OUT 1~ OUT 4, PH/L, PH/R.

T3:OUT
PH/R OFF

The next is the measure of the output level.
Press [▲/YES] SW.

T3:OUT
OUT 1 MAX

:

T3:OUT
PH/R MAX

Sin wave is output from OUT 1.
When [▲/YES] SW. is pressed in order,
the output changes from OUT 1 to PH/R as the noise is measured.
Refer to the fig.2 to see each output level and frequency.
In this case, confirm that the difference of the level of the pair
outputs(OUT 1 and OUT 2, OUT 3 and OUT4, PH/R and PH/L) should
be within 400mV.

| | OUT 1 | OUT 2 | OUT 3 | OUT 4 | PH/L | PH/R |
|--------------------|---------|---------|--------|--------|------|------|
| NOISE LEVEL (-dBm) | 73.0 | 73.0 | 72.0 | 72.0 | 74.0 | 74.0 |
| OUTPUT LEVEL (Vpp) | 5.0~9.0 | 5.0~9.0 | 6.0~10 | 6.0~10 | 6.0 | 6.0 |
| FREQUENCY (Hz) | 488 | 411 | 305 | 244 | 549 | 610 |

fig. 2

6) VDF, MDE CHECK

T4:VDF

When [▲/YES] SW. is pressed at this time,
the program for VDF check starts.
Confirm that the sound like the explosion is output
while [▲/YES] SW. is being pressed for less than 2 second.
Press [▲/YES] SW. and proceed to the next check.

T5:MDE
TEST 1

The program for MDE check starts by pressing [▲/YES] SW. again.
About 12Vpp sin wave is output on TEST 1. (fig.3)
Press [▲/YES] SW. again and the display changes to TEST 2.
If [▲/YES] SW. is pressed for 3 sec. and no sound is heard,
it's normal.
Press [▲/YES] SW. and proceed to the next check.

7) RAM CARD TEST

T6:RAM CARD
Insert RAM CARD

When RAM CARD (MCR-03) is put into the card slot,
the protect switch is off and [▲/YES] SW. is pressed here,
RAM CARD WRITE/READ TEST is done.

When this test is finished normally, PRELOAD DATA is transmitted
from M3R ROM to M3R RAM and TEST MODE is changed to the normal mode.

8. PARTS LIST

| PARTS CODE | PARTS NAME SPECIFICATIONS | P. C. BOARD | IDENTIFICATION NO. FUNCTION | Q' TY |
|-------------------------|------------------------------|----------------|--------------------------------|-------|
| BLOCK RESISTORS | | | | |
| 135005510 | RC1/885J 10K | 871 | | 2 |
| 135005510 | RC1/885J 10K | | | 4 |
| 135005510 | RC1/885J 10K | | | 1 |
| 135005510 | RC1/885J 10K | | | 2 |
| 135009510 | RC1/888J 10K | | | 1 |
| 135010510 | RC1/8810J 10K | | | 3 |
| FUSE RESISTOR | | | | |
| 184018233 | 1/6WJ 33 0HM | 871 | | 2 |
| EMI FILTERS | | | | |
| 219050100 | DS3310-55D223S | 871 | | 1 |
| 219050800 | NFV610-655 72A 206 | | | 2 |
| 219050900 | NFV610-655 72A 506 | | | 1 |
| ELECTROLYTIC CAPACITORS | | | | |
| 253011422 | 25V 2200UF | 871 | | 2 |
| 253027447 | 16V 4700UF | | | 1 |
| 254003210 | 16V 100UF | | | 1 |
| 254003322 | 16V 220UF | | | 2 |
| 254003342 | 16V 220UF | | | 3 |
| 254004310 | 25V 100UF | | | 5 |
| 254006010 | 50V 0.1UF | | | 1 |
| 254006322 | 16V 22UF | | | 2 |
| 254064210 | 25V 10UF | | | 8 |
| 254066110 | 50V 1UF | | | 2 |
| PPC | | | | |
| 264003433 | 100V 3300PF | 871 | | 4 |
| TRANSISTORS | | | | |
| 304000020 | 2SA1175 TK | 871 | | 3 |
| 304020020 | 2SC2785 TK | | | 6 |
| 304020100 | B1A14M-T | | | 4 |
| 304020110 | B1A14M-T | | | 2 |
| 304020180 | 2SC2878 A/B | | | 4 |

| PARTS CODE | PARTS NAME SPECIFICATIONS | P. C. BOARD | IDENTIFICATION NO. FUNCTION | Q' TY |
|---------------|------------------------------|----------------|--------------------------------|-------|
| FET | | | | |
| 304060022 | 2SK381-T11-B/C | 871 | | 4 |
| DIODES | | | | |
| 310002100 | SR1M-2 | 871 | | 1 |
| 314001300 | 1SS-133 | 872 | | 8 |
| BRIDGE DIODES | | | | |
| 310011000 | KB02L-6176 | 871 | | 1 |
| 310011100 | KB02ML6127 | | | 1 |
| LED | | | | |
| 312007800 | GL3HHD8 | 872 | | 8 |
| LCD | | | | |
| 313001900 | LM182F03 | M. PRT | | 1 |
| ZENNER DIODES | | | | |
| 314023900 | RD5.1ESB1-T | 871 | | 2 |
| 314024900 | RD1.1ESB2-T | | | 1 |
| ICs | | | | |
| 320001063 | UPD-4053BC | 871 | C MOS | 3 |
| 320001068 | UPD74HC04C | | HC MOS | 1 |
| 320001094 | UPD74HC139C | | HC MOS | 1 |
| 320001097 | UPD74HC04C | | SC MOS | 2 |
| 320001128 | UPD97C100A-15L | | SC MOS | 1 |
| 320001182 | UPD97C100A-15 | | EP ROM | 1 |
| 320001209 | UPD93C512EC-039 | | WAKE ROM | 1 |
| 320001210 | UPD43256AC-15LL | | S-RAM | 1 |
| 320001210 | UPD70320CJ-8-5HG | | CPU | 1 |
| 320008057 | NJM-7805FA | | REG | 1 |
| 320008972 | NJM-5532S | | OP AMP | 8 |
| 320009078 | NJM78M12FA | | REG | 1 |
| 320009079 | NJM79M12FA | | REG | 1 |
| 320011029 | M-521BL | | OP AMP | 1 |
| 320011067 | M74ALS74P | | ALS | 1 |
| 320011076 | M3238L | | OP AMP | 3 |

| PARTS CODE | PARTS NAME SPECIFICATIONS | P. C. BOARD | IDENTIFICATION NO. FUNCTION | Q' TY |
|-------------------|------------------------------|----------------|--------------------------------|-------|
| 320011100 | 5M4464AL-12 | 871 | D. RAM | 5 |
| 320011116 | MB3753DE | | TC2 | 1 |
| 320011116 | MB3753DE | | TC2 | 1 |
| 320012050 | MB874034PF | | VDF | 1 |
| 320012051 | MB874044PF | | VDF | 1 |
| 320012052 | MB874054PF | | MDE | 1 |
| 320012058 | MB83512-15P-259 | | MASK ROM | 1 |
| 320012072 | MB62314FF | | MAP25 | 1 |
| 320012076 | MB834200A-20P-2A0 | | MASK ROM | 1 |
| 320012077 | MB834200A-20P-2A1 | | MASK ROM | 1 |
| 320012078 | MB834200A-20A-2A2 | | MASK ROM | 1 |
| 320012079 | MB834200A-20A-2A3 | | MASK ROM | 1 |
| 320038006 | PC834HP-005 | | DAC | 1 |
| PHOTO COUPLER | | | | |
| 330001400 | PC-910K | 871 | | 2 |
| CRYSTAL | | | | |
| 335005500 | HC-49/U 32MHz | 871 | | 1 |
| P. C. BOARD | | | | |
| 001087100 | KLM-871/72/73 | | | 1 |
| SEMI FIXED VR | | | | |
| 350002410 | RH0615C 100K | 871 | | 1 |
| VR | | | | |
| 362005300 | RK0971220x45A 10K8x2 | 873 | | 1 |
| POWER SW. | | | | |
| 375007800 | ESB-8213V | 871 | | 1 |
| TACT SW. | | | | |
| 375008500 | SKHHAJ | 872 | | 8 |
| POWER TRANSFORMER | | | | |
| 400012000 | TC-800 | | | 1 |

| PARTS CODE | PARTS NAME SPECIFICATIONS | P. C. BOARD | IDENTIFICATION NO. FUNCTION | Q' TY |
|-------------|------------------------------|----------------|---|--------------------------------------|
| COILS | | | | |
| 402002300 | BL02RN2-RE2 | 871 | | 5 |
| 402002300 | BL02RN2-RE2 | 873 | | 2 |
| 402002800 | 2943-666671 | 871 | | 10 |
| PHONE JACKS | | | | |
| 454004300 | YKB21-5012 | 871 | | 4 |
| 454004400 | YKB21-5010 | 873 | | 1 |
| DIN JACK | | | | |
| 454006700 | YKF-51-5014A | 871 | | 1 |
| FUSE | | | | |
| 464002401 | 125V 2.5A UL | M. PRT | 117US 117CN 117EX 100JP | 1 1 1 1 |
| 464011901 | 250V 0.8A UL | | 117US 117CN 117EX 100JP | 1 1 1 1 |
| 464012003 | 250V 1.0A UL | | 117US 117CN 117EX 100JP | 2 2 2 2 |
| 464061301 | 250V T200MA | | 220GE 220SE 240GE 240AU 240AF 220WG 220SC 220FR 240UK | 1 1 1 1 1 1 1 1 |
| 464061601 | 250V T400MA | | 220GE 220SE 240GE 240AU | 2 2 2 2 |

| PARTS CODE | PARTS NAME SPECIFICATIONS | P. C. BOARD | IDENTIFICATION NO. FUNCTION | Q'TY |
|----------------|------------------------------|----------------|---|---|
| 484061601 | 250V T400WA | M. PRT | 240AF 220WG 220SC 220FR 240UK | 2 2 2 2 2 |
| 484062201 | 250V T1.6A | | 220GE 220SE 240GE 240AF 240UK 220WG 220SC 220FR 240UK | 1 1 1 1 1 1 1 1 1 |
| HARNESSES | | | | |
| 470190500 | HNS-905 (11P) | M. PRT | | 1 |
| 470190600 | HNS-906 (13P) | M. PRT | | 1 |
| 470190700 | HNS-907 (8P) | 871 | | 1 |
| 470190800 | HNS-908 (3P) | M. PRT | | 1 |
| 470190900 | HNS-909 (2P) | | | 1 |
| CONNECTOR TOPS | | | | |
| 471050500 | B5P-VH | 871 | | 1 |
| 471090200 | 5086-02C | | | 1 |
| 471094030 | TXL-P03P-B1 | | | 2 |
| 471094040 | TXL-P03P-B1 | | | 1 |
| 471094130 | TXL-P13P-B1 | | | 1 |
| 471094140 | TXL-P14P-B1 | | | 1 |
| BC CONNECTOR | | | | |
| 474008900 | L-32 | 871 | | 1 |
| CARD CONNECTOR | | | | |
| 474011300 | HCC0338 | 871 | | 1 |
| LV CONNECTOR | | | | |
| 474012700 | B2P-LV-TN | 871 | | 1 |
| IC SOCKET | | | | |
| 480001324 | 32P D1CF-32CS-E | 871 | | 1 |

| PARTS CODE | PARTS NAME SPECIFICATIONS | P. C. BOARD | IDENTIFICATION NO. FUNCTION | Q'TY |
|------------|------------------------------|----------------|---|-----------------------|
| 480010180 | M-1704 (x3) | 871 | DIN JACK SOCKET | 1 |
| 500012900 | | M. PRT | RUBBER SPACER | 1 |
| 500013000 | 3x22x3 | M. PRT | RUBBER FOOT | 4 |
| 515002300 | S-N5057 #01 | 871 | FUSE HOLDER | 8 |
| 520001700 | CR2032 | 871 | LITHIC BATTERY | 1 |
| 550012700 | | M. PRT | KNOB MASK | 1 |
| 575013908 | L-2MM | 872 | HEAT SINKS | 8 |
| 580006100 | BL40H-30-BS-AN-0 | 871 | | 1 |
| 580006200 | WSD-25-BS-AN-0 | | | 1 |
| 575013908 | L-2MM | 872 | LED SPACER | 8 |
| 600000301 | CLASS1 (SU429-58) | M. PRT | AC CORDS | 1 |
| 600000401 | SA4 (SU428-58) | | | 1 |
| 600000501 | SEV PLCSU431A-58) | | | 1 |
| 600000601 | SEV CSU431A-36) | | | 1 |
| 600001301 | KP-4819D | | | 1 |
| 600000301 | | M. PRT | 220GE 240GE 220WG 220SC 240UK | 1 1 1 1 1 |
| 600000401 | | | 240AU | 1 |
| 600000501 | | | 240AF | 1 |
| 600000601 | | | 240UK | 1 |
| 600001301 | | | 220FR | 1 |

| PARTS CODE | PARTS NAME SPECIFICATIONS | P.C. BOARD | IDENTIFICATION NO. FUNCTION | Q'TY |
|-----------------|------------------------------|---------------|--------------------------------|------|
| 60002000 | SJT (SU338-56) | M. PRT | 117CN | 1 |
| 800003900 | SPT-2 UP-686-J01 | | 117US | 1 |
| | | | 117EX | 1 |
| 600004100 | DP-127-J06 | | 100JP | 1 |
| POWER SW. KNOB | | | | |
| 620018200 | | M. PRT | | 1 |
| KNOB | | | | |
| 620020900 | (SMALL) | M. PRT | | 1 |
| KNOB ASSY. | | | | |
| 620021800 | | M. PRT | | 1 |
| ISOLATION SHEET | | | | |
| 630007500 | | M. PRT | | 1 |
| LCD WINDOW | | | | |
| 630010600 | | M. PRT | | 1 |
| PARAMETER SHEET | | | | |
| 630010900 | | M. PRT | | 1 |
| CARD GUIDE | | | | |
| 640088500 | | M. PRT | | 1 |
| MIDI SHIELD | | | | |
| 640094300 | | 871 | | 1 |
| COVER | | | | |
| 640096600 | | M. PRT | | 1 |
| PSW SUPPORT | | | | |
| 640096700 | | 871 | | 1 |

| PARTS CODE | PARTS NAME SPECIFICATIONS | P.C. BOARD | IDENTIFICATION NO. FUNCTION | Q'TY |
|--------------------|------------------------------|---------------|--------------------------------|------|
| PSW BAR | | | | |
| 640096800 | | M. PRT | | 1 |
| FIO PLATE | | | | |
| 640096900 | | M. PRT | | 1 |
| RACK MOUNT ADAPTOR | | | | |
| 640097000 | | M. PRT | | 2 |
| FRONT PANEL | | | | |
| 641005200 | | M. PRT | | 1 |
| REAR PANEL | | | | |
| 641005500 | | M. PRT | | 1 |
| LOWER CASE | | | | |
| 641005500 | | M. PRT | | 1 |
| SPRING PLATE | | | | |
| 644003000 | | M. PRT | | 2 |
| PCW CARD SLOT | | | | |
| 646028300 | | M. PRT | | 1 |
| PSW FRAME | | | | |
| 646030200 | | M. PRT | | 1 |
| BATTERY HOLDER | | | | |
| 649007400 | | 871 | | 1 |

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